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Case Study

Ayurvedic Therapeutic Management of a Chronic Liver Disease With Progressed Chronic Liver Failure: A Clinical Case Study

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ABSTRACT

Chronic Liver Failure (CLF), evolving from long-standing Chronic Liver Disease (CLD), is a progressive condition marked by impaired liver function and systemic complications. In *Ayurveda*, it is understood as a manifestation of aggravated *Pitta Dosha*, particularly *Ranjaka Pitta*, resulting in *Ama* accumulation, *Rakta Dushti*, and *Srotorodha*, leading to conditions akin to *Kamala*, *Yakritodar*, or *Kumbhak Kamala*. This case report presents a 37-year-old male with CLF and associated features such as *Mukha – Pada Shotha* (facial and pedal oedema), *Peeta Netra* (jaundiced sclera), *Daurbalya* (weakness), and *Vibandh* (constipation). A 14-day integrative *Ayurvedic* protocol including *Panchakarma* therapies, classical formulations, and dietary modifications was administered. Marked clinical and biochemical improvements were observed post-treatment, including reduced bilirubin levels, improved haemoglobin, and relief in oedema and fatigue. The outcome highlights the efficacy of individualized *Ayurvedic* management in restoring *Agni*, correcting *Pitta Dushti*, and enhancing overall quality of life in CLF patients.

Introduction

Chronic Liver Failure (CLF) is a progressive and life-threatening condition that arises as the end-stage manifestation of Chronic Liver Disease (CLD). CLD encompasses a broad spectrum of liver disorders characterized by persistent hepatic inflammation, fibrosis, and eventual architectural distortion, which may span several months to years. Over time, this progressive hepatic injury leads to cirrhosis, marked by irreversible scarring and impaired liver function, ultimately predisposing the patient to decompensation and chronic liver failure.[1]Chronic liver failure is defined by a gradual decline in hepatic function, commonly presenting with complications such as jaundice, ascites, hepatic encephalopathy, coagulopathy, and portal hypertension. It differs from acute liver failure by its insidious onset and long-standing hepatic injury background, often associated with underlying etiologies such as chronic hepatitis B or C infection, alcohol-related liver disease, non-alcoholic fatty liver disease (NAFLD), autoimmune hepatitis, or metabolic liver disorders.[2] Pathophysiologically, CLF represents a critical point where the liver is unable to sustain essential metabolic, synthetic, and detoxifying processes, despite chronic adaptation and compensatory mechanisms. The progression is frequently punctuated by episodes of acute decompensation, often triggered by infections, alcohol consumption, or drug-induced hepatotoxicity, leading to acute-on-chronic liver failure (ACLF)—a condition with a high short-term mortality.[3]Management of chronic liver failure requires a multidisciplinary approach involving hepatoprotective measures, management of complications, nutritional support, and consideration for liver transplantation, which remains the definitive treatment. Early diagnosis, regular monitoring, and lifestyle modifications play a vital role in slowing disease progression and improving quality of life.[4]

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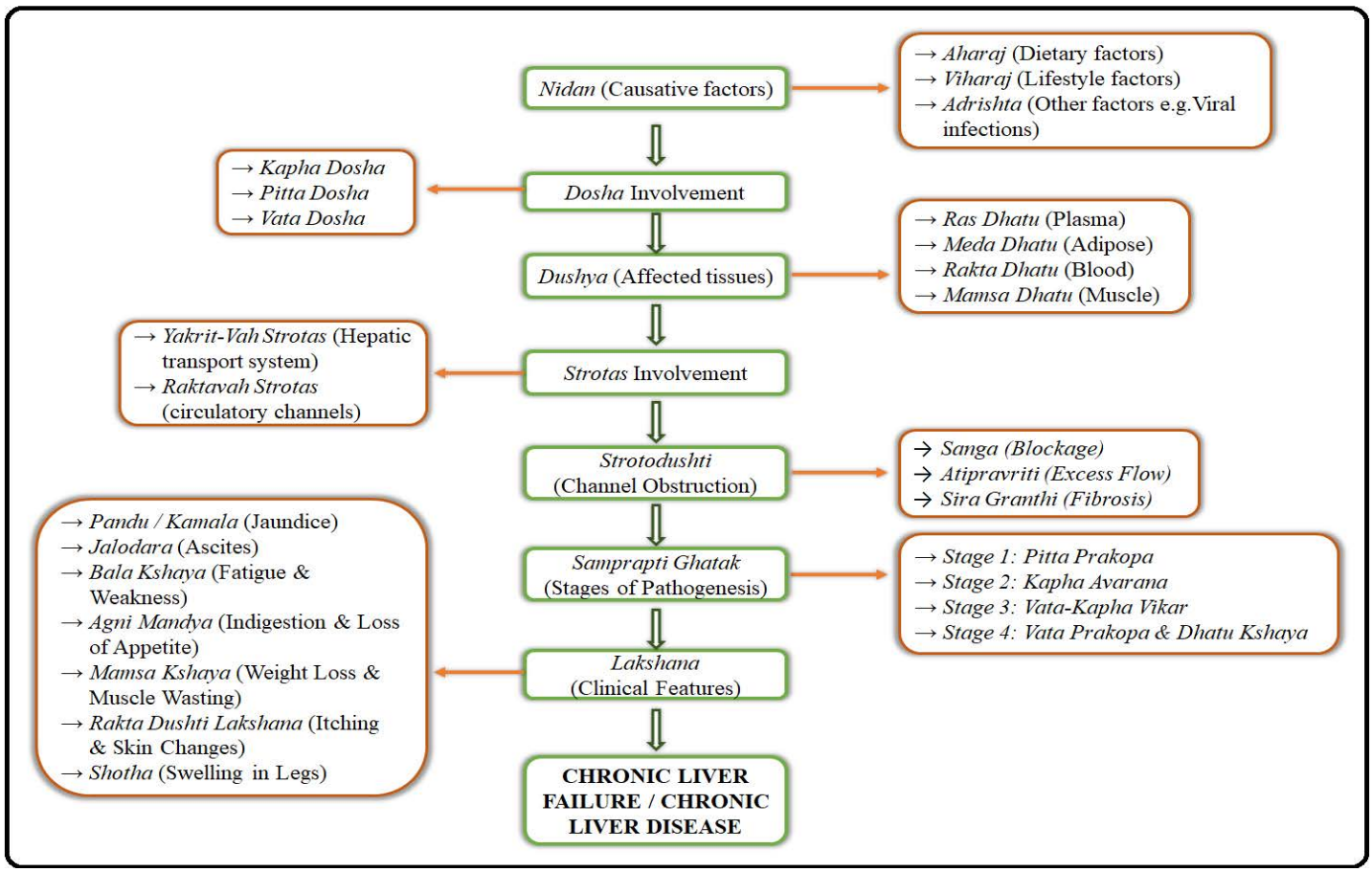
In *Ayurveda*, the liver (*Yakrit*) is regarded as a *Raktavaha Srotas Moola* (origin site of blood-carrying channels) and is closely associated with *Pitta Dosha*, particularly *Ranjaka Pitta*, which is responsible for *Rasa – Rakta Parinama* (transformation of plasma to blood). Any derangement in *Pitta*, particularly aggravated *Ama – pitta* or *Dushta Pitta*, can impair the function of *Yakrit*, leading to the accumulation of *Ama* (toxins), *Rakta Dushti* (vitiation of blood), and *Srotorodha* (obstruction in channels).[5,6] Prolonged vitiation can result in conditions comparable to *Kamala* (jaundice), *Halimaka*, *Yakritodara* (hepatomegaly), or *Kumbhaka Kamala* (obstructive jaundice or cirrhosis), described in texts like *Charaka Samhita* and *Ashtanga Hridaya*. The chronicity of these conditions leads to *Oja kshaya* (loss of vitality), *Agni Dushti*, and ultimately *Dhatu – Kshaya* (tissue depletion) — manifesting clinically as fatigue, ascites, loss of appetite, and mental confusion.[7]The *Samprapti* (pathogenesis) of CLF is illustrated in Figure 1.[8]

Figure 1: *Samprapti* of Chronic Liver Failure



Objective

To evaluate the clinical efficacy of an integrative *Ayurvedic* treatment protocol in managing symptoms and improving biochemical parameters in a patient with Chronic Liver Disease (CLD) and Chronic Liver Failure (CLF).

Case Report

A 37-year-old male with a confirmed diagnosis of Chronic Liver Failure (CLF) on a background of pre-existing Chronic Liver Disease (CLD) visited Jeena Sikho Lifecare Limited Hospital, Derabassi, Punjab, on July 8, 2025. The patient had a history of jaundice since 2024, splenomegaly noted in June 2025, and ascites. At the time of presentation, he primarily exhibited facial and pedal oedema (*Mukha – Pada Shoth*), generalized weakness (*Daurbalya*), yellowish discoloration of the sclera (*Peeta Netra Vabhasata*), intermittent constipation (*Vibandh*), skin pallor (*Panduta*), and itching localized to the fingers (*Kandu*). He also reported yellowish urine (*Peetamutrata*) and an average appetite (*Madhyama Agni*).

Upon admission, a thorough clinical assessment was performed, including the *Ashtasthana Pareeksha* (eight-fold *Ayurvedic* diagnostic framework), the findings of which are summarized in Table 1, along with baseline laboratory investigations in Table 2. Based on the overall clinical presentation, the patient was enrolled in a 14-day inpatient integrative care program, during which an individualized *Ayurvedic* treatment protocol was implemented. This comprehensive approach included classical *Ayurvedic* formulations, personalized *Panchakarma* therapies, dietary regulations, and lifestyle modifications, all tailored to the patient's specific condition and constitution.

Table 1: Pre-Treatment Vitals and *Ashtasthana Pareeksha* Observations (08-07-2024)

Parmeter	Findings
Blood Pressure	100/50 mm Hg
Pulse Rate	66/ min
Weight	55 Kg
Height	157 cm
Nadi (Pulse)	*VatajPittaj*
Mala (Stool)	*Badh* (Constipation)
Mutra (Urine)	*Peeta Varna* (Yellow - Pale)
Jiwha (Tongue)	*Saam* (Coated)
Shabda (Voice)	*Spashta* (Clear)
Sparsh (Touch)	*Anushnasheet* (Normal)
Akriti (Physique)	*Madhyam* (Normal)
Drika (Eyes)	*Peeta Netra* (Yellowish)

Table 2: Initial Laboratory Evaluation Conducted on 08-07-2025

Tests	Values
Hemoglobin (Hb)	8.40%
Total Bilirubin	22.86 mg/dl
Direct Bilirubin	9.00 mg/dl
Indirect Bilirubin	13.86 mg/dl
Aspartate Aminotransferase (AST)	249.26 IU/L
Alanine Transaminase (ALT)	260.59 IU/L
Alkaline Phosphatase (ALP)	286.96 U/L

Treatment Plan

The treatment approach has been systematically outlined in Figure 3, depicting the structured framework of the *Chikitsa Krama*.Vital parameters were closely monitored throughout the treatment period, with daily observations summarized in Table 3.

Figure 2: *Chikitsa Krama* of this case

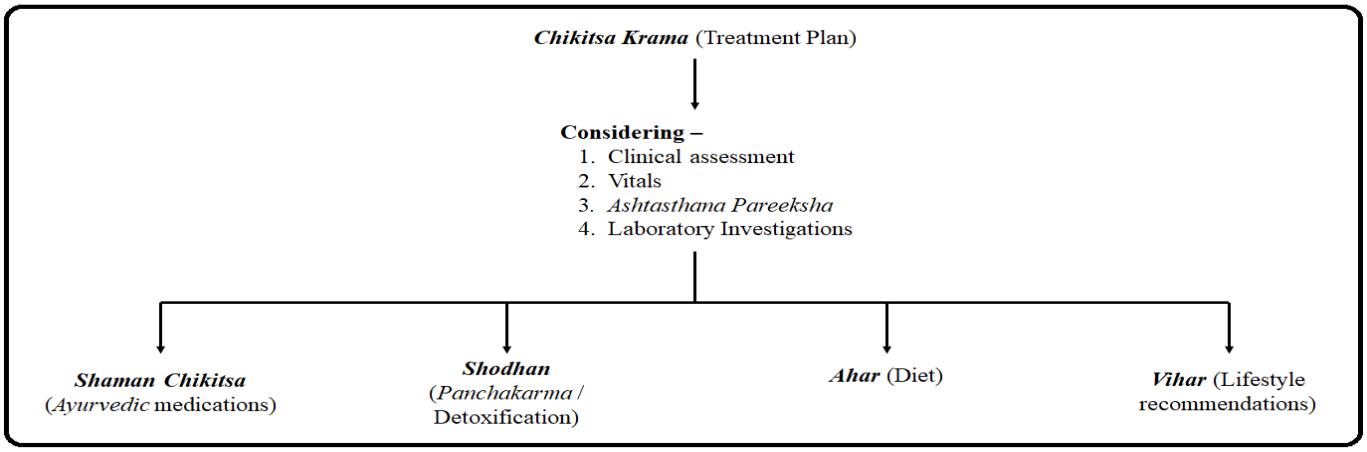


Table 3. The vitals noted during the IPD treatment

Date	Time	Weight (Kg)	Temperature (°F)	Blood Pressure (mm Hg)	Pulse Rate (per min)	Respiration (per min)	SpO2 (%)	Abdominal Girth (inch)
08-07-2025	7:20 PM	55 Kg	98 °F	110/70 mm Hg	80/min	18/min	98%	-
09-07-2025	9:00 AM	55 Kg	98 °F	110/70 mm Hg	90/min	20/min	98%	-
	7:20 PM	55 Kg	98 °F	100/70 mm Hg	52/min	20/min	98%	-
10-07-2025	5:20 AM	55 Kg	98 °F	100/80 mm Hg	50/min	20/min	98%	32 inch
	9:20 AM	55 Kg	98 °F	100/60 mm Hg	66/min	20/min	97%	-
	7:30 PM	55 Kg	98 °F	100/80 mm Hg	60/min	18/min	98%	-
11-07-2025	9:00 AM	55 Kg	98 °F	110/70 mm Hg	92/min	20/min	98%	-
	7:25 PM	55 Kg	98 °F	110/70 mm Hg	68/min	18/min	98%	-
12-07-2025	5:40 AM	55 Kg	98 °F	110/70 mm Hg	70/min	20/min	98%	31 inch
	9:00 AM	55 Kg	98 °F	110/70 mm Hg	64/min	20/min	97%	-
	7:20 PM	55 Kg	98 °F	110/80 mm Hg	58/min	18/min	98%	-
13-07-2025	5:20 AM	55 Kg	98 °F	110/90 mm Hg	50/min	20/min	98%	-
	9:00 AM	55 Kg	98 °F	110/80 mm Hg	56/min	18/min	99%	-
	7:30 PM	55 Kg	98 °F	100/80 mm Hg	58/min	18/min	98%	-
14-07-2025	5:20 AM	55 Kg	98 °F	110/80 mm Hg	60/min	18/min	98%	30 inch
	9:00 AM	55 Kg	98 °F	90/50 mm Hg	84/min	18/min	98%	-
	7:30 PM	55 Kg	98 °F	110/80 mm Hg	58/min	18/min	98%	-

15-07-2025	5:15 AM	55 Kg	98 °F	100/70 mm Hg	60/min	18/min	98%	30 inch
	9:20 AM	55 Kg	98 °F	90/60 mm Hg	96/min	18/min	99%	-
	7:30 PM	55 Kg	98 °F	100/60 mm Hg	58/min	18/min	98%	-
16-07-2025	5:30 AM	55 Kg	98 °F	100/60 mm Hg	60/min	18/min	99%	30 inch
	9:00 AM	55 Kg	98 °F	100/60 mm Hg	90/min	18/min	98%	-
	7:30 PM	55 Kg	98 °F	100/90 mm Hg	58/min	18/min	98%	-
17-07-2025	5:30 AM	55 Kg	98 °F	100/80 mm Hg	60/min	18/min	98%	-
	9:00 AM	55 Kg	97 °F	100/60 mm Hg	54/min	18/min	99%	-
	8:00 PM	55 Kg	98 °F	100/80 mm Hg	60/min	18/min	98%	-
18-07-2025	5:30 AM	55 Kg	98 °F	100/80 mm Hg	62/min	18/min	98%	29.5 inch
	9:00 AM	55 Kg	98 °F	100/80 mm Hg	72/min	18/min	97%	-
	7:30 PM	55 Kg	98 °F	110/80 mm Hg	66/min	18/min	98%	-
19-07-2025	5:20 AM	55 Kg	98 °F	100/80 mm Hg	60/min	18/min	98%	30 inch
	9:00 AM	55 Kg	98 °F	90/60 mm Hg	60/min	18/min	98%	-
	7:40 PM	55 Kg	98 °F	110/80 mm Hg	68/min	18/min	98%	-
20-07-2025	5:15 AM	55 Kg	98 °F	100/80 mm Hg	60/min	18/min	98%	-
	9:00 AM	55 Kg	98 °F	100/60 mm Hg	60/min	18/min	99%	-
	7:45 PM	55 Kg	98 °F	100/80 mm Hg	60/min	18/min	98%	-
21-07-2025	5:20 AM	55 Kg	98 °F	100/90 mm Hg	62/min	18/min	98%	-
	9:00 AM	55 Kg	98 °F	100/80 mm Hg	62/min	18/min	99%	-

Shaman Chikitsa

Based on the clinical evaluation, a detailed and patient-specific medication protocol was devised, as outlined in Table 4.

Table 4: *Ayurvedic* medicines prescribed

Date	Medicines	Dosage with *Anupana* (Medium)
08-07-2025	Liver tonic	15 ml BD (*Adhobhakta* with *Sama Matra Koshna Jala*) *
	LIV Shuddhi	1 Tab BD (*Adhobhakta* with *Koshna Jala*) **
	Dr. Immune tablet	1 Tab BD (*Adhobhakta* with *Koshna Jala*)
	Divya Shakti Powder	Half Teaspoon HS (*Nishikala* with *Koshna Jala*) ***
	Amalpit Nashak Capsule	2 Cap BD (*Pragbhakta* with *Koshna Jala*) ****
	Hiims Jalodar Har	1 Tab BD (*Adhobhakta* with *Koshna Jala*)
09-07-2025	Liver tonic	15 ml BD (*Adhobhakta* with *Sama Matra Koshna Jala*)
	LIV Shuddhi	2 Tab BD (*Adhobhakta* with *Koshna Jala*)
	Dr. Immune tablet	1 Tab BD (*Adhobhakta* with *Koshna Jala*)
	Divya Shakti Powder	Half Teaspoon HS (*Nishikala* with *Koshna Jala*)
	Amalpit Nashak Capsule	2 Cap BD (*Pragbhakta* with *Koshna Jala*)
	Hiims Jalodar Har	1 Tab BD (*Adhobhakta* with *Koshna Jala*)
	Platojee Capsule	2 Cap BD (*Adhobhakta* with *Koshna Jala*)
15-07-2025	Liver tonic	15 ml BD (*Adhobhakta* with *Sama Matra Koshna Jala*)
	LIV Shuddhi	2 Tab BD (*Adhobhakta* with *Koshna Jala*)
	Dr. Immune tablet	1 Tab BD (*Adhobhakta* with *Koshna Jala*)
	Divya Shakti Powder	Half Teaspoon HS (*Nishikala* with *Koshna Jala*)
	Amalpit Nashak Capsule	2 Cap BD (*Pragbhakta* with *Koshna Jala*)
	Hiims Jalodar Har	1 Tab BD (*Adhobhakta* with *Koshna Jala*)
	Platojee Capsule	2 Cap TDS (*Adhobhakta* with *Koshna Jala*)
19-07-2025	Liver tonic	15 ml BD (*Adhobhakta* with *Sama Matra Koshna Jala*)
	LIV Shuddhi	2 Tab BD (*Adhobhakta* with *Koshna Jala*)
	Dr. Immune tablet	1 Tab BD (*Adhobhakta* with *Koshna Jala*)
	Divya Shakti Powder	Half Teaspoon HS (*Nishikala* with *Koshna Jala*)
	Amalpit Nashak Capsule	2 Cap BD (*Pragbhakta* with *Koshna Jala*)
	Hiims Jalodar Har	1 Tab BD (*Adhobhakta* with *Koshna Jala*)
	Platojee Capsule	2 Cap TDS (*Adhobhakta* with *Koshna Jala*)
	Hemotone-I Plus	15 ml BD (*Adhobhakta* with *Sama Matra Koshna Jala*)
Discharge	Divya Shakti Powder	Half Teaspoon HS (*Nishikala* with *Koshna Jala*)
	LIV Shuddhi	1 Tab BD (*Adhobhakta* with *Koshna Jala*)
	Hiims Jalodar Har	1 Tab OD (*Adhobhakta* with *Koshna Jala*)
	Platojee Capsule	2 Cap BD (*Adhobhakta* with *Koshna Jala*)
	Liver tonic	15 ml BD (*Adhobhakta* with *Sama Matra Koshna Jala*)
	Amalpit Nashak Capsule	1 Cap BD (*Pragbhakta* with *Koshna Jala*)
* ***Adhobhakta* with *Sama Matra Koshna Jala*** - After Meal with Equal Amount of Lukewarm Water		
** ***Nishikala* with *Koshna Jala*** - At Bedtime with Lukewarm Water		
*** ***Adhobhakta* with *Koshna Jala*** - After Meal with Lukewarm Water		
**** ***Pragbhakta* with *Koshna Jala*** - Before Meal with Lukewarm Water		

Shodhan

Following a comprehensive clinical assessment, an individualized *Panchakarma* treatment protocol was designed for the patient. The regimen included therapeutic procedures such as *Matra Basti, Kashaya Basti, Udar Basti, Shirodhara, Akshi Prakshalan*, and topical *Lepam* application.

***Bhumi Amla* and *Punarnava Siddha Sneh Basti*[9]**

Preparation of *Sneha*	*Bhumi Amla* and *Punarnava* were processed into *Siddha Sneha* using the classical *Sneha Paka* method as per Ayurvedic protocol.
Pre - Procedure (*Purv karma*)	The patient was advised a light diet the day prior, followed by mild *Abhyanga* and *Swedan* to enhance the procedure's efficacy.
Main Procedure (*Pradhan karma*)	The patient was positioned in the left lateral posture, and a sterilized *Basti Netra* was attached to the *Basti Putaka*.
	Approximately 90 ml of lukewarm *Bhumi Amla* and *Punarnava Siddha Sneha* was gently administered rectally.
Post Procedure (*Paschat Karma*)	The patient was advised to retain the *Sneha* as tolerated, followed by a light warm diet and avoidance of cold, exertion, and stress.

***Kashaya Basti* with *Bhumi Amla* and *Punarnava*[10]**

Preparation of *Sneha*	A decoction was prepared by boiling equal parts of *Bhumi Amla* and *Punarnava* in water, reducing it to one-fourth, then filtering and cooling it to lukewarm, with optional additives as required.
Pre - Procedure (*Purv karma*)	The patient underwent gentle *Abhyanga* (oleation) using appropriate medicated oil, followed by mild *Swedan* (steam fomentation) to promote relaxation and facilitate smooth *Basti* administration.
	The patient was advised to consume light, easily digestible food the previous evening, observe fasting on the day of the procedure, and ensure bowel and bladder evacuation beforehand.
Main Procedure (*Pradhan karma*)	The patient was positioned in the left lateral *(Siddha)* posture with the right knee flexed and left leg extended, following which the anal region was lubricated to ensure smooth insertion of the *basti* nozzle.
	The lukewarm decoction was then gently administered rectally, and the patient was advised to maintain the position for 10–15 minutes before assuming a supine posture.
Post Procedure (*Paschat Karma*)	The patient was advised to allow natural evacuation upon urge, while post-procedure observations included assessment of stool characteristics, followed by a prescribed light diet (such as *manda* or *yusha)* and recommendations for rest and mental calmness.

***Udar Basti* with *Punarnava* Oil[11]**

Preparation of *Sneha*	*Punarnava* oil was prepared using *Kalka, Kwatha,* and *Tila Taila* in a 1:4:16 ratio, processed over mild heat until properly cooked, then filtered, stored, and gently warmed before use.
Pre - Procedure (*Purv karma*)	Prior to the procedure, the patient's *Prakriti, Dosha* involvement, and clinical indications were assessed, a light diet was advised the previous evening with fasting on the day of treatment, and a leak-proof dough ring was applied to the cleaned abdominal area to contain the oil.
Main Procedure (*Pradhan karma*)	The patient was made to lie comfortably in the supine position in a calm setting, and lukewarm *Punarnava* oil was poured into the dough ring placed over the abdomen to a depth of 1–2 inches.
	The oil was retained for 30–45 minutes, with temperature maintained by reheating as needed, while ensuring patient comfort and preventing leakage.
Post Procedure (*Paschat Karma*)	Post-procedure, the oil and dough ring were removed, the area cleaned, and the patient was advised rest, light diet, and follow-up for symptom monitoring.

***Shirodhara* with *Brahmi* oil**[12]

Preparation	The *Brahmi* oil was gently heated in a water bath to body temperature (around 39–40°C).
Pre-Procedure (*Purv Karma*)	The patient was positioned supine on the *Shirodhara* table and the eyes and ears were protected using cotton.
	A gentle massage with *Brahmi* oil was given to the head, forehead, and shoulders for 5–10 minutes to promote relaxation.
Main Procedure (*Pradhan Karma*)	The *Shirodhara* pot was placed about 5 inches above the forehead, allowing a steady stream of lukewarm *Brahmi* oil over the *Ajna chakra.*
	The oil was rhythmically poured from temple to temple for 45 minutes at a consistent temperature.
Post-Procedure (*Paschat Karma*)	The patient was rested for 15 minutes post-procedure, excess oil was removed with warm towels, followed by a warm herbal bath, and advised light diet and rest for the day.

Akshi Prakshalan* with *Dronpushpikwath[13]

Preparation	*Dronapushpi Kwath* was prepared by boiling 50 g of its coarse powder in 800 ml of water, reducing it to 200 ml, then filtering and cooling it to lukewarm before use.
Pre-Procedure (*Purv Karma*)	The patient was seated comfortably in a calm, well-lit room, and the eyes were gently cleansed with sterile, lukewarm cotton.
	Prakriti, ocular condition, and overall health were assessed to confirm suitability, and the patient was instructed to remain still and follow guidance during the procedure.
Main Procedure (*Pradhan Karma*)	Lukewarm *Dronapushpi Kwath* was gently instilled over the open eyes using a sterile dropper while the patient looked straight ahead.
	The procedure was performed for both eyes with proper hygiene to ensure effective cleansing and patient comfort.
Post-Procedure (*Paschat Karma*)	After the procedure, the eyes were cleaned, soothing drops were applied if needed, and the patient was advised rest, light protection, and follow-up for symptom relief.

Lepam* over bilateral legs with *Dashamool, Punarnava* and *Varuna

Preparation	A paste was prepared by boiling equal parts of *Dashamool, Punarnava,* and *Varun* in water to make a decoction, which was then mixed with the remaining powder to form a lukewarm lepam of suitable consistency.
Pre-Procedure (*Purv Karma*)	The patient was positioned comfortably in the supine posture with both legs exposed, and the skin was cleansed with lukewarm water and dried.
	Local temperature and skin sensitivity were assessed to ensure suitability for *Lepam Chikitsa.*
Main Procedure (*Pradhan Karma*)	The lukewarm medicated paste was applied evenly over both legs from knees to ankles in a thick layer.
	It was left undisturbed for 30–45 minutes while the patient remained still to allow proper absorption.
Post-Procedure (*Paschat Karma*)	After 30–45 minutes, the paste was removed, the area cleaned with lukewarm water, and the patient was advised rest, warmth, and follow-up to monitor symptom relief.

Ahar

An *Ayurvedic* Disciplined and Intelligent Person's Diet (D.I.P. Diet) was followed.[14] Dietary Guidelines from Jeena Sikho Lifecare Limited Hospital.

a) Pathya [15] (recommended)

- Fresh and homemade food
- Millet diet

b) Apathya [15] (to be avoided)

- Wheat, Packed food, Refined food, Diary food/ Animal food, Coffee and Tea
- Never eat after 8 PM
- Chew solid foods thoroughly with small bites – ideally 32 times – and consume liquids slowly in measured sips.

c) Hydration [14]

- Boil 2 litres of water, reduce it to half (1 litre) and consume in a day
- Alkaline water - 3-4 times a day (1 litre)
- Consume Coconut water, Coconut milk, Almond milk
- Herbal water
- Living water
- Turmeric water

d) Millet Meal [16]

- Foxtail (*Setaria italica*)
- Barnyard (*Echinochloa esculenta*)
- Little (*Panicum sumatrense*)
- Kodo (*Paspalum scrobiculatum*)
- Browntop (*Urochloa ramose*)
- *MotaAnaj* – Sorghum *(Sorghum bicolor)*

e) Special Instructions [14]

- Brisk walking 30 min with barefoot
- Sit in sunlight for 1 hour
- 10 min slow walk after every meal
- One dayfasting/ week is recommended
- Get quality sleep (8 hours)
- Cook millets in a steel cookware using only mustard oil.
- Sit in *Vajrasana* after every meal

f) Meal Structure

Time	Meal	Food Items
Early Morning (5:45 AM)	Detox	2 crushed garlic cloves, curry leaves
Breakfast (9:00 AM)	Fruits	Seasonal fruits (Pomegranate, Cucumber, Tomato, Guava) – Weight × 10 Kg
Morning Snacks (11:00 AM)	Energy Boost	*mugda yusha* , red juice, 4-5 soaked almonds
Lunch (12:30 PM - 2:00 PM)	Main Meal	**Plate 1:** Salad (Weight × 5 Kg)
		Plate 2: Millet recipes with proper hydration
Evening Snacks	Light Refreshment	Green juice (100-150 ml)
Dinner (6:00 PM)	Light Meal	Salad, fermented millets, chutney (made from five leaves, onion, tomato, garlic, and green chili)

Herbal Tea [14]:
Gauzaban *(Borago officinalis),* ***Kulanjan*** *(Alpinia galanga),* ***Badi Elaichi*** *(Amomum subulatum),* ***Laung*** *(Syzygium aromaticum),* ***Badiiyan Khtayi*** *(Illicium verum),* ***Banafsha*** *(Viola odorata),* ***Jufa*** *(Hyssopus officinalis),* ***Ashwagandha*** *(Withania somnifera),* ***Mulethi*** *(Glycyrrhiza glabra),* ***Punarnava*** *(Boerhavia diffusa),* ***Brahmi*** *(Bacopa monnieri),* ***Chitrak*** *(Plumbago zeylanica),* ***Marich*** *(Piper nigrum),* ***Adoosa*** *(Justicia adhatoda / Adhatoda vasica),* ***Saunf*** *(Foeniculum vulgare),* ***Shankh Pushpi*** *(Convolvulus pluricaulis),* ***Arjun*** *(Terminalia arjuna),* ***Tulsi*** *(Ocimum sanctum),* ***Motha*** *(Cyperus rotundus),* ***Senaye*** *(Cassia angustifolia),* ***Sounth*** *(Zingiber officinale, dried ginger),* ***Majeeth*** *(Rubia cordifolia),* ***Sarfoka*** *(Tephrosia purpurea),* ***Dalchini*** *(Cinnamomum zeylanicum),* ***Gulab*** *(Rosa damascena),* ***Green Tea*** *(Camellia sinensis),* ***Giloy*** *(Tinospora cordifolia),* ***Tej Patta*** *(Cinnamomum tamala),* ***Lal Chandan*** *(Pterocarpus santalinus),* ***White Chandan*** *(Santalum album) and* ***Pudina*** *(Mentha piperita)*

Red Juice [14]

- A 150 ml formulation was prepared using a combination of beetroot, carrot, tomato, and pomegranate.

Green Juice [14]

- A 150 ml preparation was formulated using spinach, fenugreek, bathua, amaranth, mint, coriander, curry leaves, and betel leaves,

Green Vegetable Soup: [14]

- Spinach, Peas, Carrots, Cabbage, Capsicum, Ghee, Zucchini, Cucumber, Green Gram, etc. (10 grams each)
- Add Ginger, Garlic and Black Salt
- Grind & boil for a minute
- Add lemon as per taste & serve

Vihar [14]

- **Meditation**: The patient was instructed to engage in one hour of meditation as part of the therapeutic regimen.
- ***Yoga***: Perform *Sukshm Pranayam* and *Sukhasan* for 40 minutes daily.
- **Sleep**: Ensure 6-8 hours of uninterrupted, deep sleep.
- **Walking**: The patient was advised to engage in a 30-minute brisk walk barefoot daily
- **Daily Routine**: The patient was advised to adhere to a consistent and well-regulated daily routine

Observations& Results

Throughout the treatment period, the patient demonstrated consistent clinical improvement. Quality of life assessments revealed notable enhancements in both physical and

emotional health. Within 14 days of inpatient care, there was significant alleviation of symptoms facial and pedal oedema, generalized weakness, yellowish discoloration of the sclera, intermittent constipation, skin pallor, and itching localized to the fingers. He also reported yellowish urine and an average appetite. Laboratory investigations demonstrated significant reductions in total, direct, and indirect bilirubin, SGOT, SGPT, and alkaline phosphatase levels, along with an increase in haemoglobin levels, as presented in Table 5. Table 6 highlights the changes in clinical symptoms before and after the intervention.

Table 5: Comparative Evaluation of Laboratory Parameters Pre- and Post-Treatment

Tests	Values	
	08-07-2025	19-07-2025
Hemoglobin (Hb)	8.40%	9.70%
Total Bilirubin	22.86 mg/dl	16.35 mg/dl
Direct Bilirubin	9.00 mg/dl	7.83 mg/dl
Indirect Bilirubin	13.86 mg/dl	8.52 mg/dl
Aspartate Aminotransferase (AST)	249.26 IU/L	126 IU/L
Alanine Transaminase (ALT)	260.59 IU/L	128 IU/L
Alkaline Phosphatase (ALP)	286.96 U/L	283 U/L

Table 6: Comparative Analysis of Clinical Symptoms at Admission and Discharge

Symptoms before treatment	Symptoms after treatment
Facial and pedal oedema (*Mukha – Pada Shoth*) - Score: 4+ [17]	Relieved - Score: 0 [17]
Generalized weakness (*Daurbalya*)	Improved
Yellowish discoloration of the sclera (*Peeta Netra Vabhasata*)	Resolved
Intermittent constipation (*Vibandh*)	Relieved
Skin pallor (*Panduta*)	Improved
Itching localized to the fingers (*Kandu*) - Score: 6 [18]	Relieved - Score: 0 [18]
Frothy urine (*Peetamutrata*)	Normalized
Average appetite (*Madhyama Agni*)	Improved

Discussion

In this case study, a 37-year-old male patient with a history of Liver Cirrhosis and Hypertension was admitted to Jeena Sikho Lifecare Ltd. Hospital for a six-day course of complete *Ayurvedic* treatment. The patient presented with severe symptoms, includingfacial and pedal oedema, generalized weakness, yellowish discoloration of the sclera, intermittent constipation, skin pallor, and itching localized to the fingers. Based on comprehensive initial assessments – including vital signs and findings from *Ashtasthana Pareeksha* – a personalized treatment protocol was developed, incorporating *Nidan Parivarjan* (elimination of causative factors), dietary and lifestyle modifications, *Panchkarma* therapies, and *Shaman Chikitsa* (palliative management).

***Nidan Parivarjan*:** Avoiding alcohol consumption and discontinuing the use of hepatotoxic drugs are essential preventive measures to protect liver health. These lifestyle modifications significantly reduce the risk of liver inflammation, fibrosis, and the progression to chronic liver diseases such asChronic Liver Failure (CLF).[19]Effective stress management, maintaining regular sleep patterns, and avoiding a sedentary lifestyle play a crucial role in supporting liver health. These factors help regulate metabolism, reduce oxidative stress, and prevent the onset or progression of liver disorders. Additionally, therapeutic measures were taken to correct *Agni Dushti* by improving metabolism and eliminating accumulated *Ama*.[20]

***Samprapti* (pathogenesis):** The pathogenesis of this case is depicted in Figure 1.[8]This flowchart presents an *Ayurvedic* understanding of Chronic Liver Failure (CLF) and Chronic Liver Disease (CLD) through a systematic pathophysiological model. It begins with *Nidan* (causative factors) such as *Ahara* (improper diet), *Vihar* (lifestyle), and *Adrishta* (infections), leading to *dosha* imbalance, particularly of *Pitta*, *Kapha*, and *Vata*. The disease process affects various *Dushyas* (tissues) including *Rasa*, *Meda*, *Rakta*, and *Mamsa Dhatus*, and involves *Yakrit-Vaha* and *Raktavaha Srotas* (hepatic and circulatory channels). This results in *Strotorodha* (channel obstruction) due to factors like *Sanga* (blockage), *Atipravritti* (excessive flow), and *Sira Granthi* (fibrosis). The pathogenesis progresses through four stages involving *dosha* aggravation and tissue depletion. Clinically, it manifests with signs such as *Pandu*/*Kamala* (jaundice), *Jalodara* (ascites), *Bala Kshaya* (fatigue), *Agni Mandya* (indigestion), *Mamsa Kshaya* (muscle wasting), *Rakta Dushti* (itching), and *Shotha* (leg swelling), ultimately leading to chronic liver conditions.

***Ahar* (Diet):**The patient was advised to follow a strictly regulated *Ayurvedic* dietary regimen as per the physician's guidance. The plan prioritized fresh, home-cooked meals with an emphasis on millets, while eliminating wheat, processed and refined foods, dairy products, animal-based items, and stimulants such as tea and coffee. Additionally, the patient was instructed to avoid food intake after 8 PM and to incorporate nourishing liquids like coconut water, coconut milk, and almond milk into the daily routine.[8, 21, 22]

***Vihar* (lifestyle recommendations):** The patient was advised to implement specific lifestyle modifications, including daily meditation to reduce stress and enhance mental clarity. A prescribed set of *yoga* practices was recommended to improve flexibility, promote relaxation, and support emotional well-being. Additionally, maintaining 6–8 hours of uninterrupted, restorative sleep and adhering to a structured daily routine were emphasized to support overall health and discipline.[23]

***Chikitsa* (treatment):** The physician advised a perfectly formulated *Shaman Chikitsa* and perfectly designed

Panchkarma therapies. *Panchkarma* therapies like *Matra Basti, Kashaya Basti, Udar Basti, Shirodhara, Akshi Prakshalan*, and topical *Lepam* application.

➢ *Basti* was done using *Bhumi Amla* and *Punarnava*. *Bhumi Amla* is known for its hepatoprotective and blood-purifying properties, while *Punarnava* acts as a natural diuretic, aiding in the elimination of excess fluids and supporting renal function.[9, 24, 25]

➢ *Udar Basti* was done using *Punarnava* oil. *Punarnava* reduces abdominal swelling and hepatomegaly, commonly seen in CLF, by pacifying *Kapha* and *Pittadoshas* and clearing localized inflammation.[25]

➢ *Brahmi* oil was used to perform *Shirodhara*. The lukewarm *Brahmi* oil, through its action on the *Ajna chakra*, helped calm the mind, reduced cortisol levels, and improved cerebral circulation.[12]

➢ *Akshi Prakshalan* with *Dronpushpi Kwath* (*Leucas cephalotes Spreng.*) offers localized and systemic benefits in Chronic Liver Failure by pacifying vitiated *Pitta*, thereby helping reduce scleral discoloration and associated ocular symptoms.[26]

➢ *Dashamool*, *Punarnava*, and *Varuna lepam* over bilateral legs offers localized relief in liver disorders by reducing pedal oedema through the *Shothahar* (anti-inflammatory) and *Mutravirechak* (diuretic) actions of *Punarnava* and *Varuna*. *Dashamool* helps regulate *Vata*, relieving pain and heaviness in the legs, while the combined *Srotoshodhak* (channel-clearing) effect improves peripheral circulation and facilitates the removal of excess fluid. Overall, this therapy supports systemic detoxification and symptomatic management of liver-related fluid imbalance and swelling.[25, 27, 28]

A comprehensive overview of the *Ayurvedic* formulations used in this case is provided in Table 7. *Pippali*, *Vibhitak* and *Haldi* are among the principal herbs commonly incorporated in *Ayurvedic* formulations. Their therapeutic efficacy is determined by their *Ras Panchak* – a comprehensive analysis of taste (*Rasa*), qualities (*Guna*), potency (*Virya*), post-digestive effect (*Vipaka*), and specific action (*Prabhava*) – as follows.[29]

- *Pippali (Piper longum)* possesses *Katu Rasa* (pungent taste), *Laghu* (light) and *Snigdha Guna* (unctuous qualities), with *Ushna Veerya* (hot potency) and *Madhur Vipak* (sweet post-digestive effect). It is renowned for its *Agnivardhak Prabhav* (digestive fire-enhancing effect) and *Rasayan Karma* (rejuvenative action). *Pippali* is especially effective in managing *Ama* (toxins) and enhancing *Agni* (digestive fire), making it beneficial in metabolic and hepatic disorders.
- *Vibhitaki* (*Terminalia bellirica*) exhibits *Kashaya* (astringent), *Madhur* (sweet), and *Tikta Ras* (bitter taste), with *Laghu* (light) and *Ruksha Guna* (dry quality). It has *Ushna Veerya* (hot potency) and *Madhur Vipak* (sweet post-digestive effect). Known for its *Tridoshaghna Prabhav* (balancing all three *Doshas*), it is particularly effective in alleviating *Kapha* – related disorders and promoting detoxification and elimination.
- *Haldi* (*Curcuma longa*) contains *Katu* (pungent) and *Tikta Ras* (bitter taste), with *Laghu* (light) and *Ruksha Guna* (dry quality). It holds *Ushna Veerya* (hot potency) and *Katu Vipak* (pungent post-digestive effect). *Haldi's Krimighna* (anti-parasitic), *Vishaghna* (detoxifying), and *Varnya Prabhav* (complexion – enhancing properties) make it widely used in *Pitta* and *Rakta Dushti* (vitiation of blood and *Pitta*) conditions, including liver disorders and skin diseases.

Table 7: Detailed description of medicines prescribed

Medicines	Ingredients	Therapeutic Effects
Liver Tonic Syrup	***Drakshasava, Jirkadhyaristha, Punarnavaristha, Rohitkaristha, Mustakaristha.***	*Yakrit-samvardhan* (support liver health) and enhance digestion process
LIV *Shuddhi* Capsule	Extracts of ***Bhumiamlaki*** (*Phyllanthus niruri*), ***Kasani*** (*Cichorium intybus*), ***Himsra*** (*Capparis spinosa*), ***Punarnava*** (*Boerhavia diffusa*), ***Guduchi*** (*Tinospora cordifolia*), ***Kakamachi*** (*Solanum nigrum*), ***Arjun*** (*Terminalia arjuna*), ***Biranjasipha*** (*Tephrosia purpurea*), ***Kasamardha*** (*Cassia occidentalis*), ***Jhavuka*** (*Tamarix gallica*), ***Vidanga*** (*Embelia ribes*), ***Chitraka*** (*Plumbago zeylanica*), ***Kutaki*** (*Picrorhiza kurroa*), ***Haritaki*** (*Terminalia chebula*) and ***Bhringraj*** (*Eclipta alba* or *Eclipta prostrata*)	*Yakrit Shodhan* (good for Liver Detox), *Yakrit-vardhak* (strengthens liver function) and *Swasthya Rakshak* (maintains overall wellness)
Dr. Immune tablet	***Kesar*** (*Crocus sativus*), ***Shudh Kuchla*** (*Strychnos nux-vomica*), ***Ashwagandha Ext.*** (*Withania somnifera*), ***Shatawari Ext.*** (*Asparagus racemosus*), ***Pipali*** (*Piper longum*), ***Tulsi*** (*Ocimum sanctum*), ***Laung*** (*Syzygium aromaticum*), ***Choti Elaichi*** (*Elettaria cardamomum*), ***Sonth*** (*Zingiber officinale*), ***Haldi*** (*Curcuma longa*), ***Loh Bhasm*** (*Ferrum*), ***Swaran Makshik Bhasm*** (*Chalcopyrite*), ***Mukta Shukti Bhasm*** (*Pinctada margaritifera*).	*Dosa sodhanam karoti* (eliminates toxins), *Agni deepan* (enhances digestion), *Hormonal samatvam dadhati* (promotes hormonal balance), *Ojah vardhan* (boosts immunity), *Rakta pravah sudhkarayan* (improves blood circulation)

Divya Shakti Powder	***Trikatu (****Zingiber officinale, Piper nigrum and Piper longum),* ***Triphala*** *(Emblica officinalis, Terminalia bellirica and Terminalia chebula),* ***Nagarmotha*** *(Cyperus rotundus),* ***Vay Vidang*** *(Embelia ribes),* ***Chhoti Elaichi*** *(Elettaria cardamomum),* ***Tej Patta*** *(Cinnamomum tamala),* ***Laung*** *(Syzygium aromaticum),* ***Nishoth*** *(Operculina turpethum),* ***Sendha Namak*** *,* ***Dhaniya*** *(Coriandrum sativum),* ***Pipla Mool*** *(Piper longum root),* ***Jeera*** *(Cuminum cyminum),* ***Nagkesar*** *(Mesua ferrea),* ***Amarvati*** *(Achyranthes aspera),* ***Anardana*** *(Punica granatum),* ***Badi Elaichi*** *(Amomum subulatum),* ***Hing*** *(Ferula assafoetida),* ***Kanchnar*** *(Bauhinia variegata),* ***Ajmod*** *(Trachyspermum ammi),* ***Sazzikhar*** *,* ***Pushkarmool*** *(Inula racemosa),* ***Mishri*** *(Saccharum officinarum).*	*Deepan* (appetiser), *Pachan* (digestive stimulant), and *Rasayan* (rejuvenative therapy)
Amalpit Nashak **Capsule**	***Mulathi*** *(Glycyrrhiza glabra),* ***Pudina*** *(Mentha arvensis / Mentha piperita),* ***Hing (bhurjit)*** *(Ferula asafoetida),* ***Chitrak*** *(Plumbago zeylanica),* ***Jeera*** *(Cuminum yminum),* ***Vidang*** *(Embelia ribes),* ***Ajwain*** *(Trachyspermum ammi),* ***Marich*** *(Piper nigrum),* ***Pippali*** *(Piper longum),* ***Shunthi*** *(Zingiber officinale – dried ginger),* ***Amla*** *(Emblica officinalis / Phyllanthus emblica),* ***Vibhitaki*** *(Terminalia bellirica),* ***Haritaki*** *(Terminalia chebula),* ***Shankh Bhasm*** *(Calx of Conch Shell – purified and processed marine shell powder)*	*Amlapittahar* (anti-acidity), *Shulaprashaman* (pain reliever), *Vatanuloman* (Vata regulator), *Agnisandhukaran* (digestive stabilizer) and *Shothahar* (anti-inflammatory)
Jalodar Har Vati	***Pippali*** *(Piper longum),* ***Haridra*** *(Curcuma longa),* ***Vibhitaki*** *(Terminalia bellirica),* ***Tamra Bhasm*** *(Calcined Copper),* ***Amla*** *(Emblica officinalis),* ***Bhavna Dravya - Thuhar Dudh*** *(Euphorbia nerifolia),* ***Gum Acacia*** *(Acacia arabica),* ***Sodium Methyl Paraben*** *(Sodium methyl p-hydroxybenzoate),* ***Sodium Propyl Paraben*** *(Sodium propyl p-hydroxybenzoate).*	*Deepan* (appetizer), *Pachan* (digestive), *Yakrit Shodhan* (liver detoxification) and *Yakrit Rasayan* (hepato-rejuvenative)
Platojee Capsule	***Papaya*** *(Carica papaya),* ***Guduchi*** *(Tinospora cordifolia),* ***Sudarshan*** *,* ***Arogyavardhini*** *,* ***Amlaki rasayan*** *, and* ***Neem*** *(Azadirachta indica).*	*Raktavardhak* (blood enhancer), *Raktotpatti Janak* (stimulates blood formation) and *Vyadhikshamatva Vardhak* (immunity booster)
Hemotone-I Plus	***Laung*** *(Syzygium aromaticum),* ***Badi Elaichi*** *(Amomum subulatum),* ***Javitri*** *(Myristica fragrans - Aril),* ***Dal Chini*** *(Cinnamomum verum),* ***Haldi*** *(Curcuma longa),* ***Nag Kesar*** *(Mesua ferrea),* ***Ajwain*** *(Trachyspermum ammi),* ***Chavya*** *(Piper chaba),* ***Kutaki*** *(Picrorhiza kurroa),* ***Pippali*** *(Piper longum),* ***Gaj Pipal*** *(Scindapsus officinalis),* ***Devadaru*** *(Cedrus deodara),* ***Kaunch*** *(Mucuna pruriens) ,* ***Chitrak*** *(Plumbago zeylanica),* ***Danti*** *(Baliospermum montanum),* ***Daru Haldi*** *(Berberis aristata),* ***Dhania*** *(Coriandrum sativum),* ***Gangayran*** *(Clerodendrum serratum),* ***Gokshur*** *(Tribulus terrestris),* ***Rasna*** *(Pluchea lanceolata),* ***Kanghi- Atibala*** *(Abutilon indicum),* ***Kherati- Bala*** *(Sida cordifolia),* ***Hauber- Hapuspa*** *(Lepidium sativum),* ***Lodhra*** *(Symplocos racemosa),* ***Marorphali- Murva*** *(Clematis triloba / Marsdenia tenacissima),* ***Mulethi*** *(Glycyrrhiza glabra),* ***Nagarmotha*** *(Cyperus rotundus),* ***Pohkar*** *(Aconitum heterophyllum),* ***Lal Punarnava*** *(Boerhavia diffusa),* ***Saunf*** *(Foeniculum vulgare),* ***Supari*** *(Areca catechu),* ***Tejpatta*** *(Cinnamomum tamala),* ***Utangan*** *(Blepharis edulis),* ***Vaividanga*** *(Embelia ribes),* ***Akarkara*** *(Anacyclus pyrethrum),* ***Triphala*** *(a combination of Terminalia chebula, Terminalia bellirica, and Phyllanthus emblica),* ***Trikatu*** *(a combination of Piper longum, Piper nigrum, and Zingiber officinale),* ***Munakka*** *(Vitis vinifera - Dried Grapes),* ***Dhay Phool*** *(Woodfordia fruticosa),* ***Gwar Patha*** *(Aloe barbadensis / Aloe vera),* ***Loh Bhasm*** *(Iron Ash - Ayurvedic Preparation),* ***Ashwagandha*** *(Withania somnifera),* ***Shehad*** *(Honey - Natural Product from Apis species),* ***Gur***	*Raktavardhak* (blood enhancer), *Raktaprasadan* (blood purifier) and *Srotoshodhak* (detoxifier)

Future Research Aspects

Liver cirrhosis and hypertension (especially portal hypertension) are closely related and can lead to severe complications, including gastrointestinal bleeding, ascites and hepatic encephalopathy.[30] The future research aspects of these conditions are crucial for better understanding, diagnosing, preventing and treating liver diseases. Here are some potential suggestions for future research:

- Enhancing awareness: Liver diseases are difficult to treat or cure; however, preserving liver health through heightened public awareness – particularly among high-risk groups – can be achieved through proactive approaches [31]
- Pathophysiology: Understanding the molecular mechanisms driving liver fibrosis and portal hypertension to identify new therapeutic targets.[32]

- Diagnostic Tools: Developing non-invasive biomarkers and advanced imaging techniques for early detection and monitoring disease progression.[33]
- Treatment Strategies: Improving pharmacological treatments for portal hypertension, preventing gastrointestinal bleeding and advancing endoscopic or surgical interventions. [34]
- **Liver Regeneration:** Investigating stem cell therapies and enhancing liver transplant outcomes. [35]
- **Gut-Liver Axis:** Exploring the role of the gut microbiome in cirrhosis and portal hypertension to design new treatments. [36]
- **Personalized Medicine:** Tailoring treatments based on genetic profiles and advancing targeted therapies for better outcomes and *Prakriti* (individual constitution) based *Ayurvedic* approaches. [37]
- **Cardiovascular and Renal Impact:** Understanding the interplay between liver disease, cardiovascular health and renal complications like hepato renal syndrome.[38]
- **Quality of Life:** Focusing on psychosocial factors and patient-reported outcomes to improve the overall care experience.[39]

Conclusion

This case study illustrates the successful *Ayurvedic* management of Chronic Liver Failure (CLF) on a background of pre-existing Chronic Liver Disease (CLD)in a patient presenting with advanced clinical symptoms and significantly impaired liver function.Through the integration of classical *Ayurvedic* formulations, dietary regulations, and lifestyle modifications tailored to the patient's constitution and *dosha* imbalance, marked improvement was observed. The patient's recovery is evidenced by the resolution of all symptoms demonstrates the potential of holistic *Ayurvedic* interventions in the long-term management of CLF.Laboratory findings also demonstrate a gradual and significant improvement over the course of treatment.The patient's complete course of treatment is depicted in Figure 3.

Clinical

- The patient exhibited progressive and significant clinical improvement throughout the course of *Ayurvedic* management.
- The patient had **facial and pedal oedema (*Mukha–Pada Shoth*, Score 4+), which was completely relieved (Score 0)**.
- **Generalized weakness (*Daurbalya*) and average appetite (*Madhyama Agni*) improved**, while **skin pallor (*Panduta*) also showed noticeable recovery**.
- **Yellowish discoloration of the sclera (*Peeta Netra Vabhasata*) resolved entirely**, and **intermittent constipation (*Vibandha*) was relieved**.
- **Itching localized to the fingers (*Kandu*, Score 6) subsided completely (Score 0), and frothy urine (*Peetamutrata*) normalized**.

Laboratory

- Laboratory findings correlated well with the documented clinical improvements.
- Laboratory investigations initially revealed **low Hemoglobin (8.40 g/dl), which improved to 9.70 g/dl after treatment**.
- **Total bilirubin levels decreased from 22.86 mg/dl to 16.35 mg/dl,** with **direct bilirubin reducing from 9.00 mg/dl to 7.83 mg/dl** and **indirect bilirubin from 13.86 mg/dl to 8.52 mg/dl**.
- Hepatic enzymes also showed significant improvement, as **AST reduced from 249.26 IU/L to 126 IU/L** and **ALT from 260.59 IU/L to 128 IU/L**.
- **Alkaline phosphatase levels** remained relatively stable, showing a minimal change from **286.96 U/L to 283 U/L**.

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Lab Reports

1. Before *Ayurvedic* Intervention

WELLCARE PATH LAB
SCO-80, Shri Bala Ji Complex, Old Ambala Road, Dhakoli, Zirakpur (Pb) -160104, Contact No.: +91 98729 96010
Email : wellcarepathlab.pvt.ltd@gmail.com
NABL Certified NABL-M(EL)T-02764 — MABL M(EL)T LABS
AN ISO 9001:2015 CERTIFIED CLINICAL LAB — CERTIFICATE No.: QMS-WCL-2209152
We are enrolled with CMC EQAS & AIIMS EQAS External Quality Assurance, We are running CMC EQAS & AIIMS Quality Controls daily a day

LABORATORY REPORT

Patient Name
Age / Sex : 37 years / Male
UHID No : 62682025
Reference : Dr. JEENA SIKHO LIFECARE
Organization : WELLCARE PATH LAB PVT.LTD
Org ID : WELLCARE PATH LAB
Registered On : JUL 08, 2025, 10:35 A.M.
Collected On : JUL 08, 2025, 10:35 A.M.
Reported On : JUL 08, 2025, 12:46 P.M.

Investigations	Result(s)		
Complete Blood Count(CBC)			
Hemoglobin (HB) Method : Cynmeth Photometric Measurement	8.4	13.0 - 17.0	g/dL
Total Leucocytes Count (TLC) Method : Electrical Impedance	7500	4000 - 11000	/cmm
DIFFERENTIAL COUNT			
Neutrophils Method : VCSn Technology	81	40 - 75	%
Lymphocytes Method : VCSn Technology	15	20 - 45	%
Monocytes Method : VCSn Technology	02	2 - 10	%
Eosinophils Method : VCSn Technology	02	1 - 6	%
Basophils	00	0 - 1	%
Total RBC Count Method : Electrical Impedance	2.31	3.50 - 6.50	Mill/Cumm
Platelet Count Method : VCSn Technology	0.77	1.50 - 4.50	Lacs/Cumm
PCV/HCT Method : Calculated	24.9	35.0 - 47.0	%
Red cell distribution width (RDW) Method : Electrical Impedance	14.4	13.0 - 18.0	%
Mean corpuscular volume (MCV) Method : Electrical Impedance	107.9	76.0 - 96.0	fl
Mean Corpuscular Hemoglobin (MCH) Method : Calculated	36.6	27.0 - 32.0	Pg
Mean Corpuscular Hemoglobin Concentration(MCHC) Method : Calculated	33.9	30.0 - 35.0	%

Microscopy,Fully Automated Hematology Analyser alfa swelab double chamber 3 Part

Liver Function Test (LFT)			
Total Bilirubin Method : Vanadate : oxidation	22.86	0.20 - 1.00	mg/dL
Direct Bilirubin Method : Vanadate : oxidation	9.00	0.00 – 0.60	mg/dL
Indirect Bilirubin Method : Derived	13.86	0.00 - 0.80	mg/dL

CONDITIONS OF LABORATORY TESTING & REPORTING
The reporting result are for the information and for interpretation of the referring doctor only. • If the result of the test (s) are alarming or unexpected, the patient is advised to contact the laboratory immediately for possible remedial advice • This reports is not valid for medico-legal purposes • Wellcare Path Lab not its employees assume any liability to for any loss or damage that may be incurred by any person as a result of presuming the meaning or contents of the report • It is Presumed that the tests performed on the specimen belong to the patient: names or identified. • Results of tests may vary from laboratory to laboratory and also in some parameter from time to time for the same patient. Only such medical professional who understand reporting units, reference ranges and limitations or technologies should interpret result. • Reports valid until stamped by labs authorized signatory.

NOT VALID FOR MEDICO LEGAL PURPOSE | EMERGENCY 24 HOURS | TIMINGS : 8.00 AM TO 8.00 PM

WELLCARE PATH LAB
SCO-80, Shri Bala Ji Complex, Old Ambala Road, Dhakoli,
Zirakpur (Pb) -160104, Contact No.: +91 98729 96010
Email : wellcarepathlab.pvt.ltd@gmail.com

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We are enrolled with CMC EQAS & AIIMS EQAS External Quality Assurance, We are running CMC EQAS & AIIMS Quality Controls daily a day

LABORATORY REPORT

Patient Name		**Reference** : Dr. JEENA SIKHO LIFECARE	**Registered On** : JUL 08, 2025, 10:35 A.M.
Age / Sex	: 37 years / Male	**Organization** : WELLCARE PATH LAB PVT.LTD	**Collected On** : JUL 08, 2025, 10:35 A.M.
UHID No	: 62682025	**Org ID** : WELLCARE PATH LAB	**Reported On** : JUL 08, 2025, 12:46 P.M.

001818925

Investigations	Result(s)		
AST (SGOT) Method : IFCC* Without Pyridoxal Phosphate Activation	249.26	< 40.0	IU/L
ALT (SGPT) Method : IFCC* Without Pyridoxal Phosphate Activation	260.59	< 41.0	IU/L
Alkaline Phosphatase (ALP) Method : Modified IFCC	286.96	0.00 - 150.0	U/L
Total Protein Method : Biuret Method	5.69	6.4 - 8.2	g/dL
Albumin Method : Albumin Bcg1	3.20	3.4 - 5.0	g/dL
Globulin Method : Derived	2.49	1.8 - 3.8	g/dL
A/G Ratio.	1.29	0.9 - 1.8	

Interpretation:

Enhanced liver fibrosis (ELF) test is used to evaluate liver fibrosis in patients with suspected chronic liver disease due to Viral Hepatitis B & C, Alcoholic liver disease and Non alcoholic fatty liver disease

Electrolytes

Sodium (NA+) Method : Method: ISE Direct	130.5	136.0 - 146.0	mEq/L
Potassium (K+) Method : Method: ISE Direct	3.86	3.50 - 5.50	mEq/L
Chloride (CL) Method : Method: ISE Direct	99.0	96.0 - 108.0	mEq/L

Method:

ISE Indirect

Interpretation

Sodium measurements are used in the diagnosis and treatment of aldosteronism (excessive secretion of the hormone aldosterone), diabetes insipidus (chronic excretion of large amounts of dilute urine, accompanied by extreme thirst), adrenal hypertension, Addison's disease (caused by destruction of the adrenal glands), dehydration, inappropriate antidiuretic hormone secretion, or other diseases involving electrolyte imbalance. Potassium measurements are used to monitor electrolyte balance in the diagnosis and treatment of disease conditions characterized by low or high blood potassium levels. Chloride measurements are used in the diagnosis and treatment of electrolyte and metabolic disorders such as cystic fibrosis and diabetic acidosis

VIRAL MARKER RAPID TEST

HIV RAPID TEST

HIV - 1 Antibody Method : -	NON-REACTIVE

2. After *Ayurvedic* intervention

MAX Lab

Laboratory Investigation Report

Patient Name		Centre	: 6804 - Jeena Sikho Lifecare Limited-Derabassi
Age/Gender		OP/IP No/UHID	: //
MaxID/Lab ID	: ML05964531/6287072500068	Collection Date/Time	: 19/Jul/2025 11:44AM
Ref Doctor	: Dr.Suyash	Reporting Date/Time	: 19/Jul/2025 03:48PM

Clinical Biochemistry

SIN No:B287720993

Liver Function Test (LFT), Serum

Date	19/Jul/2025 11:44AM	Unit	Bio Ref Interv
Total Protein	4.99	g/dL	6.6 - 8.3
Albumin	3.0	g/dL	3.5 - 5.2
Globulin	1.9	g/dL	2.3 - 5.0
A.G. ratio	1.6		1.2 - 1.5
Bilirubin (Total)	16.35 (C)	mg/dL	0.3 - 1.2
Bilirubin (Direct)	7.83	mg/dL	0.0 - 0.2
Bilirubin (Indirect)	8.52	mg/dL	0.1 - 1.0
SGOT- Aspartate Transaminase (AST)	126	U/L	< 50
SGPT- Alanine Transaminase (ALT)	128	U/L	< 50
AST/ALT Ratio	0.98	Ratio	
Alkaline Phosphatase	283	U/L	30 - 120
GGTP (Gamma GT), Serum	77.0	U/L	< 55

Kindly correlate with clinical findings

Note: (C) Represent Critical Value

*** End Of Report ***

Dr. Anjali Bhutani, MD
Director & Head
Max Lab

Dr. Neerja Dhingra, MD, DNB
Principal Consultant
Max Lab

Dr. Ajit Pratap Singh Panaych, MD
Associate Consultant
Max Lab

Test Performed at :1066 - Max Hospital Mohali, Near Civil Hospital, Phase-6 Mohali
Booking Centre :6804 - Jeena Sikho Lifecare Limited-Derabassi, Khata No.9/11, Devi Nagar, Tehsil Derabassi District SAS Nagar, 9855110370
The authenticity of the report can be verified by scanning the QR Code on top of the page

Page 1 of 1

Max Lab Limited (A Wholly Owned Subsidiary of Max Healthcare Institute Ltd.)
Helpline No. 7982 100 200 www.maxlab.co.in feedback@maxlab.co.in

Conditions of Reporting: 1. The tests are carried out in the lab with the presumption that the specimen belongs...
relate specifically to the sample received in the lab and are presumed to have been...
results are for the information and interpretation by the referring doctor...
shall in no event be liable for accidental damages...
Liability of Max Healthcare for deficiency...